



Research Article

A CASE STUDY ON THE EFFECT OF *LEKHAN BASTI* WITH *UDVARTANA* IN THE MANAGEMENT OF *STHAULYA* WITH SPECIAL REFERENCE TO OBESITY

Kamre Sneha S. ^{1*}, Solanke S. G. ¹, Chawre S. V. ², Kabra P. R. ³

¹PG Student, Department of Kaychikitsa, Government Ayurved College & Hospital, Nagpur, Maharashtra, India

²Assistant Professor, Department of Kaychikitsa, Government Ayurved College & Hospital, Nagpur, Maharashtra, India

³Head of Department, Department of Kaychikitsa, Government Ayurved College & Hospital, Nagpur, Maharashtra, India

*Corresponding Author Email: sneha0506kamre@gmail.com

Article Received on: 22/09/20 Approved for publication: 29/10/20

DOI: 10.7897/2230-8407.111089

ABSTRACT

To study the effect of *Lekhan Basti* with *Udavartana* in the Management of *Sthaulya*. The study was conducted to evaluate cost effective and convenient treatment for *Sthaulya* in *Ayurved*. Obesity means accumulation of excess body fat in the body. Obesity increases various disease and complications particularly Cardio-vascular diseases, Type 2 Diabetes, Obstructive sleep apnea, Cancer, Osteoarthritis and Depression. As per Modern medicine, the management of Obesity include lifestyle changes, medications, or surgery advised but medications advised have so many side effects like heart valve problem, blood vessel problem. Also, surgery is not a cost-effective therapy. So that, to find out cost effective management in Obesity through *Ayurveda* following study was carried out. *Charak* has mentioned *Sthaulya* (~Obesity) as *Santarpan-janya Vikar*, accumulation of excessive *Meda* and *Mansa Dhatu*. Management in *Ayurveda* for *Sthaulya* consists of *Langhana*, *Shodhan* and *Shaman Chikitsa*. *Sushruta* has described *Lekhan Basti* in *Sthaulya*. In all classical texts, *Udavartana* is mentioned as part of *Dincharya* and for *Sthaulya*. *Udvartana* procedure remove the foetid odours, alleviates aggravated *Kapha* and *Meda*. A case study of 38 years old female patient with *Sharirbhar Vridhhi* for 10 years, *Katishula* and *Ubhaya Janusandhi Shula* since 2 years was treated with *Lekhan Basti* and *Udavartana*. Encouraging results were obtained which are presented in full paper. A case recorded and treated in our institute. Significant reduction in weight from 103kg to 93kg and BMI from 45.41 to 39.5 was seen in patient in one month without exercise.

Keywords: *Sthaulya*, *Santarpanajanya Vikar*, *Udavartan*, *Lekhan Basti*, Obesity

INTRODUCTION

Background

Obesity is defined as abnormal or excessive fat accumulation that presents a risk to health. A crude population measures of obesity is the body mass index. A person with a BMI of 30 or more is generally considered as obese. A person with a BMI equal to or more than 25 is considered overweight. Body mass index is calculated by dividing weight in kilograms (kg) by height in meters (m) squared. ¹

Obesity is most commonly caused by a combination of excessive food intake, lack of physical activity, and genetic susceptibility. A few cases are caused primarily by genes, endocrine disorders, medications, or mental disorder. ²

Overweight and Obesity are major risk factors for a number of chronic diseases, including diabetes, heart disease, stroke, arthritis, and some cancers. Overweight and Obesity are now dramatically on the rise in low- and middle-income countries. Obesity is mostly preventable through a combination of social changes and personal choices. Changes to diet and exercising are the main treatments. Diet quality can be improved by reducing the consumption of energy-dense foods, such as those high in fat or sugars, and by increasing the intake of dietary fiber. Medications can be used, along with a suitable diet, to reduce appetite or decrease fat absorption. If diet, exercise, and medication are not effective, a gastric balloon or surgery may be

performed to reduce stomach volume or length of the intestines, leading to feeling full earlier or a reduced ability to absorb nutrients from food. ²

Atisthaulya is considered as one of the eight despicable conditions as described by *Charak*. He has mentioned *Sthaulya* (~Obesity) as *Santarpan-janya Vikar*, ³ accumulation of excessive *Meda* and *Mansa Dhatu*. *Vayu* due to passage having been obstructed with fat, moves about abundantly in stomach and thus stimulates digestion and absorbs food. Hence the person digests food quickly and desires excessively the intake of food. In case of delay in taking food, is afflicted with some severe disorders. These two *Agni* and *Vayu* are particularly complicating. In the event of excessive increase of *Meda*, *Vayu*. Suddenly give rise to severe disorders and thus destroy the life shortly. ⁴ The person is called as *Ati-Sthula* who, due to *Mans-medativruddhi*, *Chala Sphika*, *Guda*, *Udar*, *Sthan* and suffers from deficient metabolism and energy. ⁵

For reducing the bulk of the *Meda*, *Guru* and *Atarpana chikitsa* was mentioned by *Charaka*. ⁶ *Vata*, *Kapha*, *Meda shamak Ahara* and *Vihara*, *Ruksha*, *Ushna*, *Tiksha Basti*, *Ruksha Udvartana* was stated in *Sutrasthan* by *Charaka*. ⁷ As per Modern medicine, the management of Obesity include life style changes, medications, or surgery advised but medications advised have so many side effects like heart valve problem, blood vessel problem. Also, surgery is not a cost-effective therapy. So that, to find out cost effective management in Obesity through *Ayurveda* following study was carried out.

MATERIAL AND METHOD

Case Description

A 39 year old female patient having following complaints was came in OPD and admitted IPD of Kayachikitsa Department, Government Ayurveda College, Nagpur, Maharashtra, India. Informed written consent was taken from patient before the start of study.

Chief Complaints

Complaints	Duration
Sharir-bhar vruddhi (~Weight gain)	10 years
Katishula (~Lumbar region pain)	2- 3 years
Ubhaya Janu-sandhi shula (~Bilateral Knee joint pain)	2- 3 years
Sakashta Utkatasana (~Difficulty in standing)	2- 3 years
Ubhaya Pada Chimchimayanna (~Tingling Numbness)	2- 3 years
Uradaha (~Acidity)	2 months
Udgar (~Burping)	2 months
Adhman (~Gaseous distention)	2 months

History of Present Illness

Patient having gradually increase in above symptoms from 10 years, so for treatment patient get admitted in Government Ayurveda College Nagpur.

Past History

No history of DM, Hypertension, Hypothyroidism.
No history any other illness.

Family History: Father, sister and brother- obese

Vaiyaktik Vrittant:

Aahar

Aahar Praman: 4 chapati, rice 2 bowl, 2 bowl bhaji, 2 bowl varan.

Ushahpana: 2 Glass Koshna Jala daily

Fruits and salad: Banana, Apple, Pomegranate, Cucumber, carrot.

Junk food: Furmented Food - In 2-3 months

Panipuri, Samosa - once in a month

Sabudana - Twice in a month

Potato Chips - Once in a month

Ghee and Dalada - Sometimes

Ras Pradhanya: Sarva-Rasa Pradhan

Guna: Guru, Abhishyandi, Snigdha, Tikshna.

Diet Habit: Had habit of Vishamashana, Paryushit Aahar sevam

Type of Food: Patient taken mixed type of food (Non-veg once in a week).

Vihar: Housewife

Lunch time – 2.30 pm

Dinner time – 8.30 pm

Divaswap – 1.30 hours

Vyasan: Betel nut, Sauf

Kshudha: Kshudhamandya

Pipasa: Atipipasa

Nidra: Prakrit

Ashtavidha Parikshan:

Nadi - 84/ min

Mala – Malavashantamba

Mutra – Mutradaha

Jivha- Sama

Shabda - Spashta

Sparsha – Samashitoshna

Drika – Spashta

Aakriti – Ati- sthula

Dashavidha Parikshan

Prakriti – Tridoshaja (Kapha-pradhan)

Sarata – Ras, Mamsa, Meda, Ashthi, Majja sarata

Sar - Ras, Mamsa, Medo, Ashthi, Majja sarata

Samhanana – Alpa

Satmya – Sarvasatmya

Satva - Hina

Aharshakti – Pravar

Vyayamshakti – Alpa

Vaya – 38 years

Desha- Jangala

Praman – Height – 155 cm

Weight – 103 kg

BMI – 45.41

Waist circumference – 89 cm

Hip circumference – 149 cm

Vikrut Strotas Parikshan

Udakovaha Strotus- Kantha, Talu Shosha, Atipipasa

Annavaaha Strotus- Avipaka, Kshudhamandya

Rasvaha Strotas – Ashraddha, Aruchi, Asyavairasya, Sada, Anga-gaurav, Angamarda

Mansavaaha Strotus- Sakashta Utkatasana, Chankramana

Medovaha Strotas - Katishula, Udar- medolambanam, Atisveda

Asthivaha Strotas - Khalitya, Palitya

Purishvaha Strotas - Malabaddhata

Mutravaha Strotas - Mutradaha

Svedavaha Strotas- Atisveda Pravritti

Samprapti Ghatak

Dosha: Kaphapradhan tridosha.

Vayu – Saman, Vyana

Pitta – Pachak

Kapha – Kledak

Dushya: Rasa, Meda

Agni: Medadhatvagni-mandya, Jatharagnivridhi

Ama: Medodhatugata

Strotus: Annavaaha, Rasavaaha, Mansvaha, Medovaha

Strotodushti: Sang, Vimargagamana, Atipravritti

Sancharsthan: Sphik-sthanodar Lambanam

Adhistan: Sarvasara specifically Udara, Sphika, Stana

Vyaktasthana: Sarva Sharir

Svabhav: Chirkalika

Sadhyasadhya: Krucchrasadhya

Investigations

CBC: Hb% - 12 gm %, TLC- 6600, RBC- 3.56 lac. Platelet- 230000

ESR- 43

RBS: 104 mg/dl

Lipid Profile

Total Cholesterol – 217

Cholesterol HDL- 56

Cholesterol LDL- 140

Triglyceride - 105

Cholesterol Ratio- 3.8

LDL/HDL Ratio- 2.5

Thyroid Function Test

T3 – 145.9

T4- 10.5

TSH- 1.78

Urine Report

A/B – Nil
Sugar – Nil
ME – NAD

Chandan (Rakta)

Musta
 Vidanga
 Devdaru

X –ray Lumbar Spine (AP/ Lat.)

Loss of Lumbar Lordosis
 Peri distal osteophytes are seen involving lower lumbar vertebral line.
 Reduction in heights of L1-2 and L2-3 Intervertebral disc spaces are seen with peri- distal end plate sclerosis.
 Changes of Lumbar spondylosis.

Assessment Criteria

BMI
 Hip-Waist Ratio

MANAGEMENT

Pachan Chikitsa:

Initially Pachan Kwath- 40 ml TDS is given as an Ama Pachak for 5 days.
 Medopachak Vati 250mg 2 Tablet TDS given.

Sthanik Chikitsa:

Sarvanga Snehana and Peti-Swedana.
 Sarvanga Udvartana for 30 days. ⁸
 Katibasti with Kottamchukyadi Taila for 17 days.

Udvartana Dravya:

Kulattha
 Triphala Churna
 Haridra
 Daruharidra

Shodhan Chikitsa:

Sahachar Taila – Matra Basti
 Lekhan Basti – Niruha for 30 days. ⁹
Purva Karma: Sarvanga Snehana by Tila Taila for 30 days.
 Sarvanga Swedana by Peti-Sweda Yantra by Dashamula Kwath for 30 days.

Pradhan Karma:

Preparation of Basti –

Matra Basti

60 ml Sahachar Tail with 5 gm saindhava were mixed properly and stirred properly then administered in authentic way.

Lekhan Basti

40 gm Triphala Bharada soaked in 800 ml of water for a night. Then, this mixture was boiled till 350 ml mixture was remaining. 60 ml of Gomutra, 20 ml of Sahachar taila, 20 ml of Madhu, 5 gm of Prakshepa Churna and 5 gm of Saindhava were added in Triphala Kwath stirred properly then administered in authentic way.

Basti Dravya – Lekhan Basti

Triphala Kwath
 Gomutra
 Madhu
 Yavakshar
 Ushakadi Gana Prakshepa
 Saindhava

Table 1: Sahachar Taila- Matra Basti (60 ml)
 Lekhan Basti - Niruha Basti (450 ml)

Sr No.	Type of Basti	Date of Basti administration	Basti Deya Kal	Basti Pratyagaman Kal	Dharan Kal (min)
1	Matra	8.8.18	6.30 pm	6 am	11.30 hrs
2	Matra	9.8.18	12pm	2.30 pm	2.30 pm
3	Niruha	10.8.18	6.30 pm	7.30 pm	1 hr
4	Niruha	11.8.18	2.35 pm	3.05 pm	½ hr
5	Niruha	12.8.18	11 am	11.30 am	30 mints
6	Matra	13.8.18	10.45 am	7 pm	10 hrs
7	Niruha	14.8.18	11.15 am	12.30 pm	1.15 hrs
8	Niruha	15.8.18	11.30 am	11.35 am	5 mints
9	Niruha	16.8.18	12 pm	1 pm	1 hr
10	Matra	17.8.18	11 am	6 pm	5 hrs
11	Niruha	18.8.18	11.15 am	12.30 pm	1.15 hrs
12	Niruha	19.8.18	12.45 pm	2.5 pm	45 mints
13	Niruha	20.8.18	12 pm	1.15 pm	1.15 hrs
14	Matra	21.8.18	Basti hold due to Menses	Continued after 6 days	
15	Matra	26.8.18	12 pm	6 pm	5 hrs
16	Niruha	27.8.18	12.45 pm	2.15 pm	1.30 hrs
17	Niruha	28.8.18	11 am	12.30 pm	1.30 hrs
18	Niruha	29.8.18	11 am	1.15 pm	2.15 hrs
19	Matra	30.8.18	1.15 pm	7 am	18 hrs
20	Niruha	31.8.18	11 am	4 pm	5 hrs
21	Niruha	1.9.18	12 pm	1.30 pm	1.30 hrs
22	Niruha	2.9.18	12.30 pm	1.15 pm	45 mints
23	Matra	3.9.18	1.30 pm	9 pm	8.30 hrs
24	Niruha	4.9.19	11.45 am	12.40 pm	55 mints
25	Niruha	5.9.19	12.10 pm	2 pm	1.50 hrs
26	Niruha	6.9.19	11 am	12.35 pm	1.35 hrs
27	Matra	7.9.19	1.15 pm	4 pm	3.45 hrs
28	Niruha	8.9.19	12.15 pm	12.50 pm	35 mints
29	Matra	9.9.19	1 pm	5.30 pm	5.30 hrs
30	Matra	10.9.18	12 pm	6 am	18 hrs

Shaman Chikitsa

Chandraprabha Vati 250 mg 2 Vyanodane

Medopachak Kwath 40 ml Apane.

Table 2: Clinical Significance

Date	Weight in kg	BMI
6.8.18	103	42.9
8.8.18	102	42.5
9.8.18	101	42
10.8.18	101	42
11.8.18	101	42
12.8.18	100	41.6
18.8.18	100	41.6
21.8.18	100	41.6
24.8.18	98	40.8
27.8.18	97	40.4
2.9.18	97	40.4
3.9.18	97	40.4
6.9.18	95	39.5
8.9.18	94	39.1
10.8.19	93	38.7

Table 3: Praman

Date	Waist Circumference	Hip Circumference	Ratio
6.8.18	118	149	0.79
8.8.18	116	146	0.79
15.8.18	115	140	0.82
18.8.18	116	138	0.84
3.9.18	116	137.5	0.84
6.9.18	113	136	0.83

RESULT AND DISCUSSION

A case recorded and treated in our institute. Significant reduction in weight from 103kg to 93kg and BMI from 45.41 to 39.5 was seen in patient in one month without exercise.

Obesity happens over time when you eat more calories than it used. The balance between calories-in and calories-out differs for each person. Factors that might affect the weight include a genetic makeup, overeating, eating high-fat foods, and not being physically active. Dietary changes, increased physical activity and proper medications can help to lose weight.

Obesity can be correlated with *Sthaulya*. *Atisthauilya* (Overweight) is considered as one of the eight despicable conditions as described by *Charak*. He has mentioned *Sthaulya* (~Obesity) as *Santarpan-janya Vikar*,³ accumulation of excessive *Meda* and *Mansa Dhatu*. For reducing the bulk of the *Meda*, *Guru* and *Apatarpana chikitsa* is mentioned by *Charaka*.⁶ *Vata*, *Kapha*, *Meda Shamak Ahara* and *Vihara*, *Ruksha*, *Ushna*, *Tikshna Basti*, *Ruksha Udvartana* was stated in *Sutrasthan* by *Charaka*.⁷ *Sushrut* mentioned *Sthaulya* as *Ama* and *Rasa-nimittaja Vyadhi*.⁹ *Agni* and *Vayu* are particularly complicating. Therefore, for *Medo-Dhatvagnimandya* and *Amapachan*, *Rukshan Pachan Kvath* (*Triphala*, *Musta*, *Vidanga*, *Guduchi*) 40 ml TDS was given to patient.

Sushrut has described role of *Lekhan Basti* in *Sthaulya*. The drugs used in *Lekhan Basti* possesses *Viruddha Guna* of *Meda* and *Kapha*.¹⁰ The drugs of *Lekhan Basti* have dominance of *Katu-Tikta-Kashaya Rasa*, *Laghu-Tikshna-Sukshma Guna*, *Ushna Virya* and *Katu Vipaka*. *Katu*, *Tikta*, *Kashaya Rasa* reduces *Kleda*. *Basti* perform the action of *Samprapti Vighatana* by virtue of its *Rasa*, *Guna*, *Virya*, *Vipaka*. It also reduces *Kapha*, *Meda*, and *Sveda Dushti* and thus help in *Lekhan Karma* which has resulted in the reduction of the following: *Angachalatva*, *Alasya*, *Utsahani*, *Nidraadhikya*, *Svedadhikya*, *Snigdhangata*,

Angagaurava, *Gasrasada*. *Basti* controls *Vayu* and causes *Koshtashuddhi* which starts proper metabolism by removing *Avarana* and further nourishment of next *Dhatu* takes place.

The procedure of rubbing dry medicated powders over the body with friction in a direction of opposite to the hair growth is termed as *Udvartana*.⁸ In *Udvartana*, due to increased friction to all parts of the body, the increased fat is depleted. During the process of *Udvartan Ushma* of the body is increased. Increased *Ushma* helps to digest the *Ama* thus remove *Avaran* of *Kapha*, *Meda*, which is main pathogenesis in *Sthaulya*. *Kulatthadi Churna* was used in this case study, having properties like *Ruksha*, *Ushma* and *Sukshma*. By, virtue of it, it helps in reducing the excess *Meda*, *Kapha* and *Kleda*. Not only had that, but status of *Meda Dhatu Agni* also increased. Thus, its consequence the nourishment of next *Dhatu*.

Chandraprabha Vati act as a *Shamaka*, *Balya* and *Rasayani* and added in a dose of 250 mg, 2 tablet *Vyanodane* given as *Shaman Dravya* and *Rasayana* to correct *Dhatu-Pariposhan Kram* and *Uttarottar Dhatu Pushti*. *Medopachak Kvath* 40ml *Vyanodane* were added for *Dushta Medodhatu Pachan* and for proper *Utapatiti* of newly forming *Meda Dhatu*.

CONCLUSION

It is obvious from the fore said discussion that *Lekhan Basti* along with *Udvartana* is effective in *Sthaulya* (Obesity). However, it was observed in only one case. Scholars of upcoming era should undertake planned study to evaluate the effect for benefit of mankind.

REFERENCES

1. Obesity [cited on 2019 April 18] www.mayoclinic.org/diseases-conditions/obesity/symptoms-causes/syc-20375742

2. Obesity [cited on 2019 April 20] <https://n.m.wikipedia.org/wiki/obesity>
3. Tripathi R., editor. Chapter 23/6 Sutrasthana. Charaka Samhita. Chaukhamba Sanskrit Pratishthan; 2011.p.324
4. Tripathi R., editor. Chapter 21/5-8 Sutrasthana. Charaka Samhita. Chaukhamba Sanskrit Pratishthan;2011. p.308
5. Tripathi R., editor. Chapter. 21/9 Sutrasthana. Charaka Samhita Chaukhamba Sanskrit Pratishthan;2011. p. 308
6. Tripathi R., editor. Chapter 21/20 Sutrasthana. Charaka Samhita. Chaukhamba Sanskrit Pratishthan;2011. p.310
7. Tripathi R., editor. Chapter 21/21 Sutrasthana. Charaka Samhita. Chaukhamba Sanskrit Pratishthan;2011.310
8. Tripathi B., editor. Sutrasthana. Ashtang Hridayam Chaukhamba Sanskrit Pratishthan; 2013.p.32
9. Shastri A., editor. Chapter 15/37.Sutrasthan. Sushruta Samhita Chaukhamba Sanskrit Pratishthan; 2015.p.82
10. Shastri A., editor. Chapter 15/38 Sutrasthana. Sushruta Samhita Chaukhamba Sanskrit Pratishthan; 2015.p.82

Cite this article as:

Kamre Sneha S. *et al.* A case study on the effect of lekhan basti with udvartana in the management of sthaulya with special reference to obesity. *Int. Res. J. Pharm.* 2020;11(10):37-41. <http://dx.doi.org/10.7897/2230-8407.111089>

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: IRJP is solely owned by Moksha Publishing House - A non-profit publishing house, dedicated to publishing quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IRJP cannot accept any responsibility or liability for the site content and articles published. The views expressed in articles by our contributing authors are not necessarily those of IRJP editor or editorial board members.